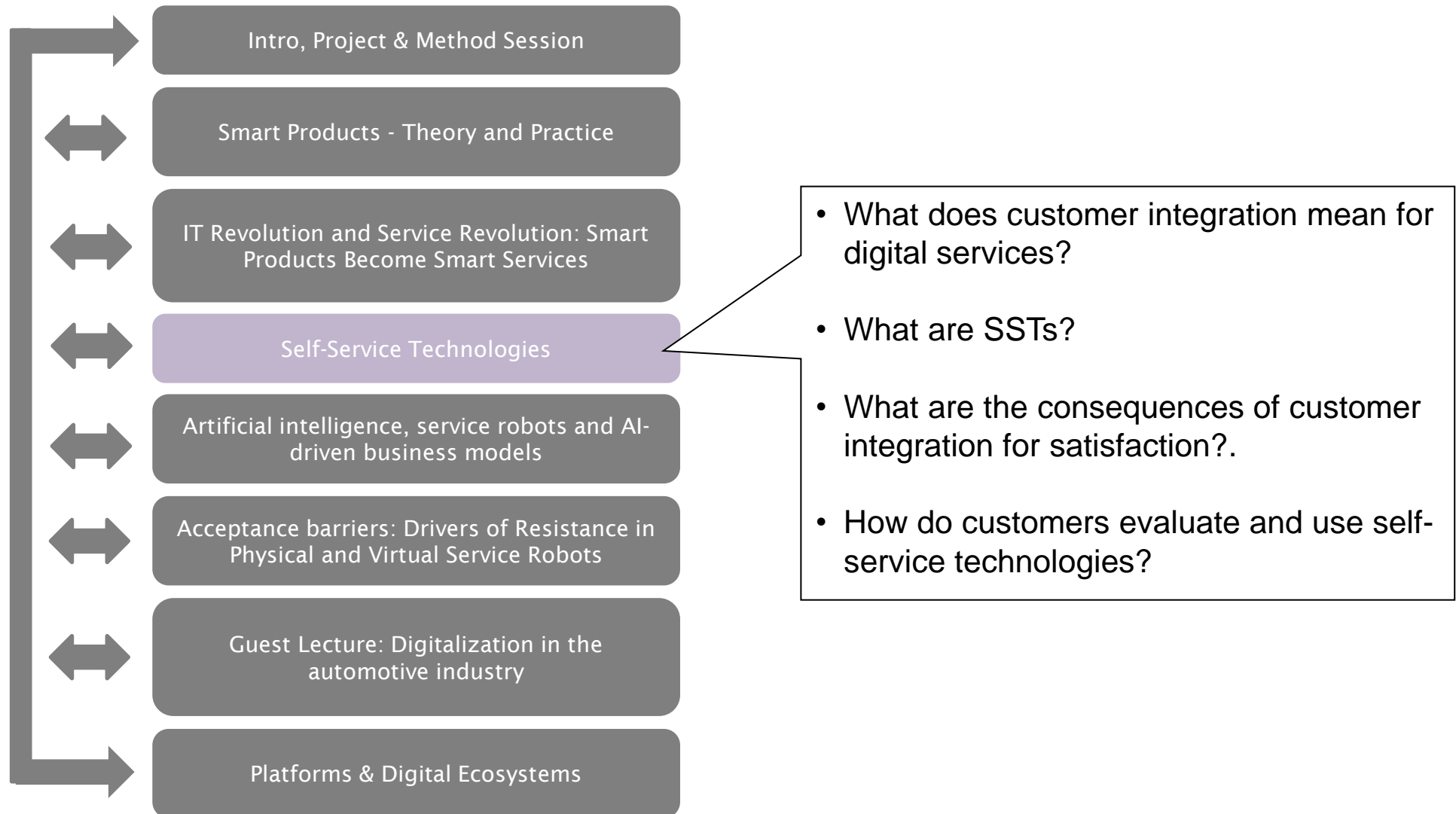


Self-Service Technologies (SSTs)

Dr. Stefan Raff

THEMATIC STRUCTURE OF THIS MODULE

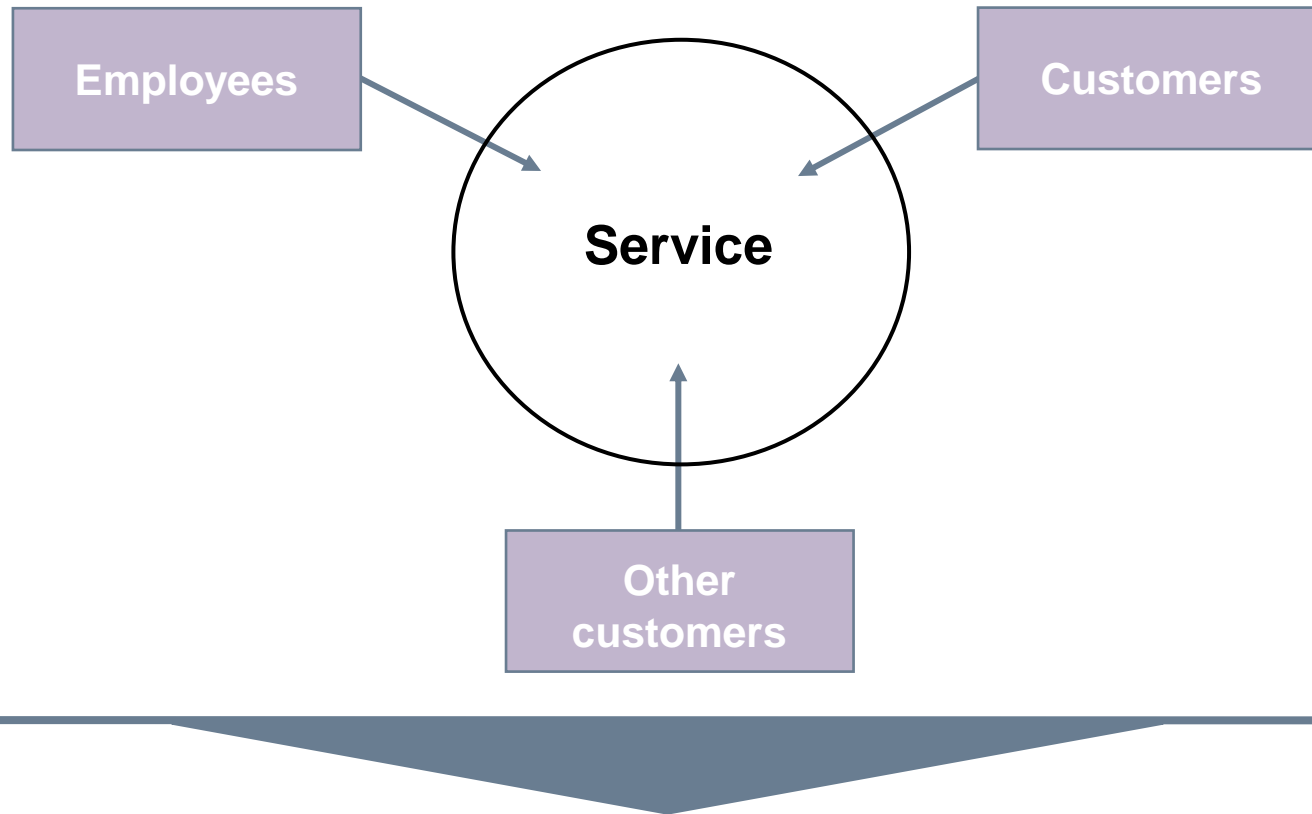


Introduction: customer integration in everyday life

CUSTOMER INTEGRATION IN EVERYDAY LIFE

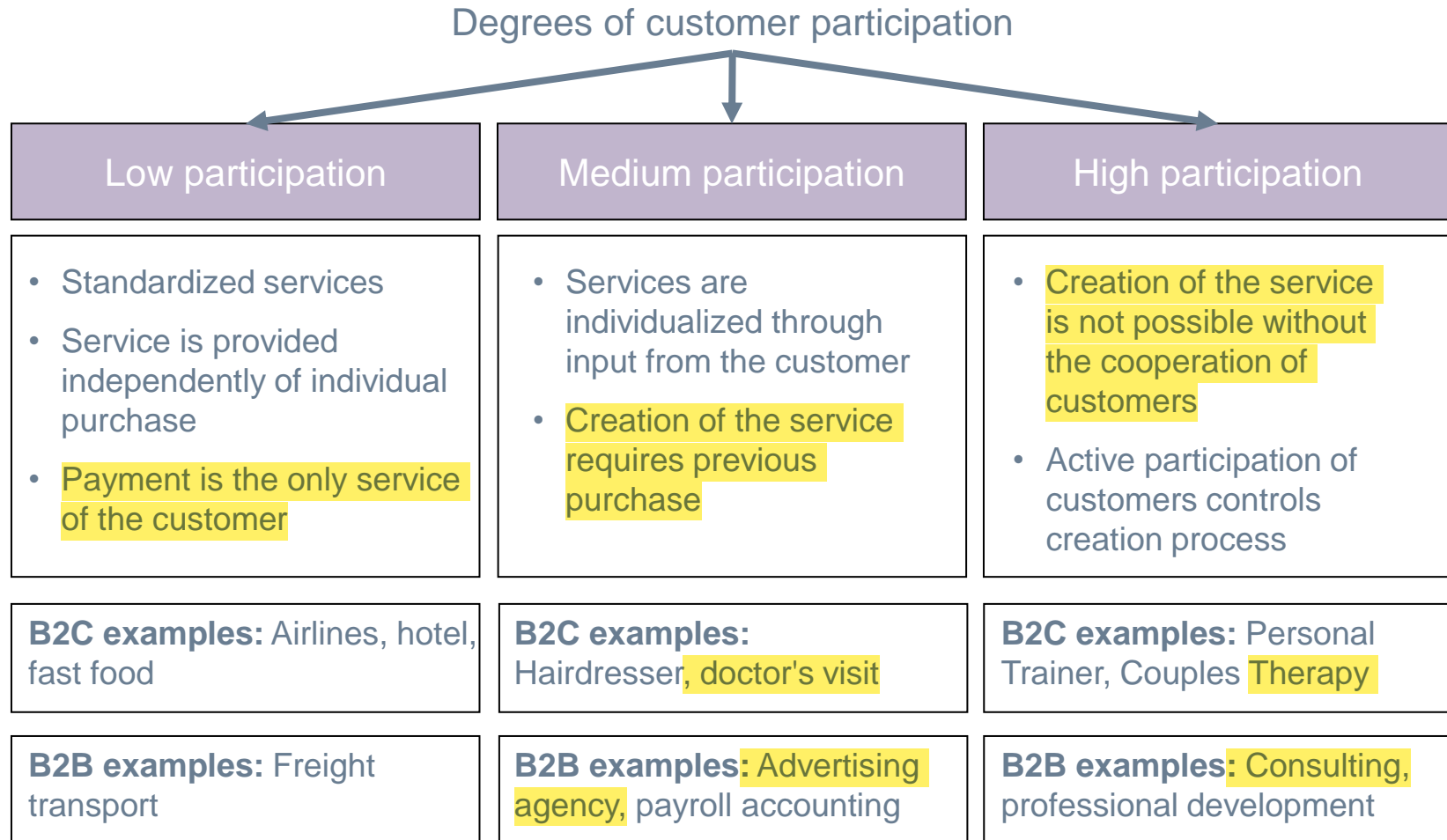


CUSTOMER INTEGRATION



Customer integration describes the fact that - in addition to employees - customers contribute an important part to the creation of the service.

CUSTOMER INTEGRATION IN EVERYDAY LIFE



Source: Lovelock/Wirtz (2016), p. 313 f.; Zeithaml/Bitner/Gremler (2009), p. 388.

CUSTOMER INTEGRATION IN EVERYDAY LIFE

- Customers often contribute their energy, time and resources and take responsibility in creating the service

- ▶ **Customers as "partial employees"**

- Integrating customers into creation can increase a company's productivity (self-check-in, gas pumps), but it can also decrease it

- ▶ **Determine optimal distribution of tasks**

- Customers will not want to take over tasks if this lowers their own productivity (e.g., increased time expenditure)

- ▶ **Create clear incentives for customers**

Source: Lovelock/Wirtz (2016), p. 32 ff.; Zeithaml/Bitner/Gremler (2009), p. 392 f.

Introduction to Self-Service Technologies



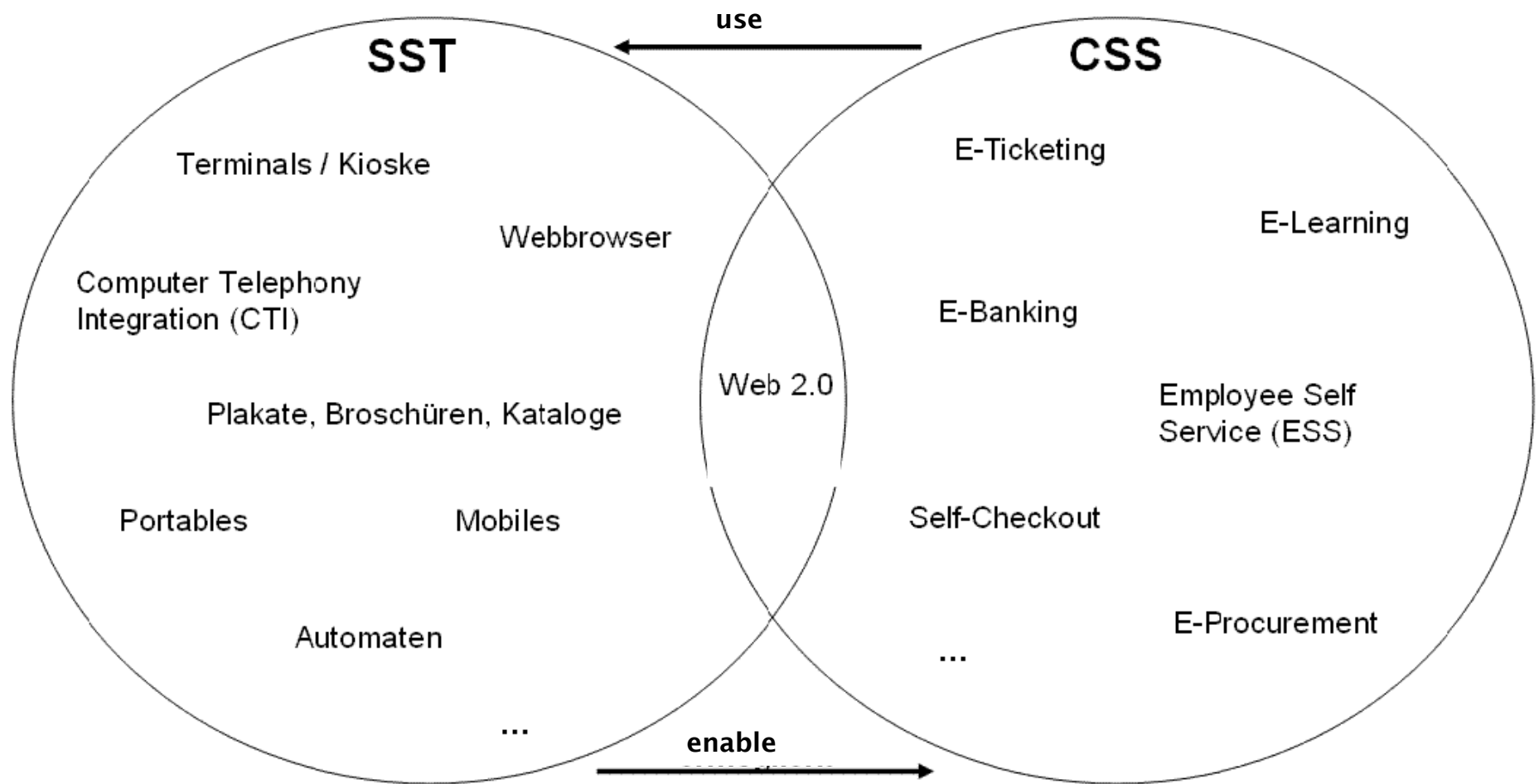
Airport SST



MC Donald's SST



Migros Subito self-scanning



RELEVANCE OF SELF-SERVICE TECHNOLOGIES (SST)

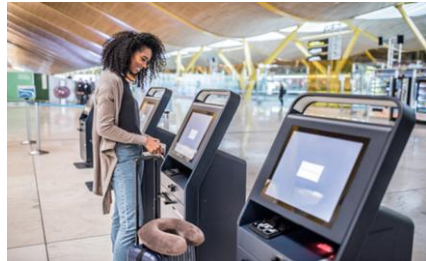
ATMs



Online banking



Self-check-in



Self-Scanning



Self-service technologies (SST) are the logical next step in customer integration enabled by technology

POSSIBLE ADVANTAGES OF SST

Need-fulfillment

- For **urgent needs**, SSTs are immediately and **immediately available** (e.g., urgent transfer, **need for cash**)

Better than Alternative

- SSTs enable temporal and **geographic flexibility in** service creation (e.g., online stores, web check-in)
- SSTs are often **cheaper** than face-to-face channels (e.g., cheaper prices for airline tickets online)
- SSTs enable direct service creation **without interaction with employees**

Individualisability

- SSTs allow (actual or perceived) **individualization** of services in the context of mass customization (e.g., photo books)

Source: Meuter et al. (2000), p. 56.

POSSIBLE DISADVANTAGES OF SST

Problems in the process

- Technological problems with the use of SST (e.g., ATM does not work).
- Problems with the service creation process (e.g., online orders do not arrive)

Bad Design

- Lack of user-friendliness, systems that are difficult to use (e.g., confusing online outlets).
- Limitations in SST performance and flexibility (e.g., limited amount of money in ATMs).

Customer-induced problems

- Problems in the process that are due to a lack of knowledge or errors on the part of the customer (e.g., forgetting the PIN)

Source: Meuter et al. (2000), p. 56.

Self-Service Technologies Acceptance

USER EVALUATION OF STT

Shoppers have a love/hate relationship with self-checkouts

33 EXPERT COMMENTS

DISCUSSION



BRAINTRUST

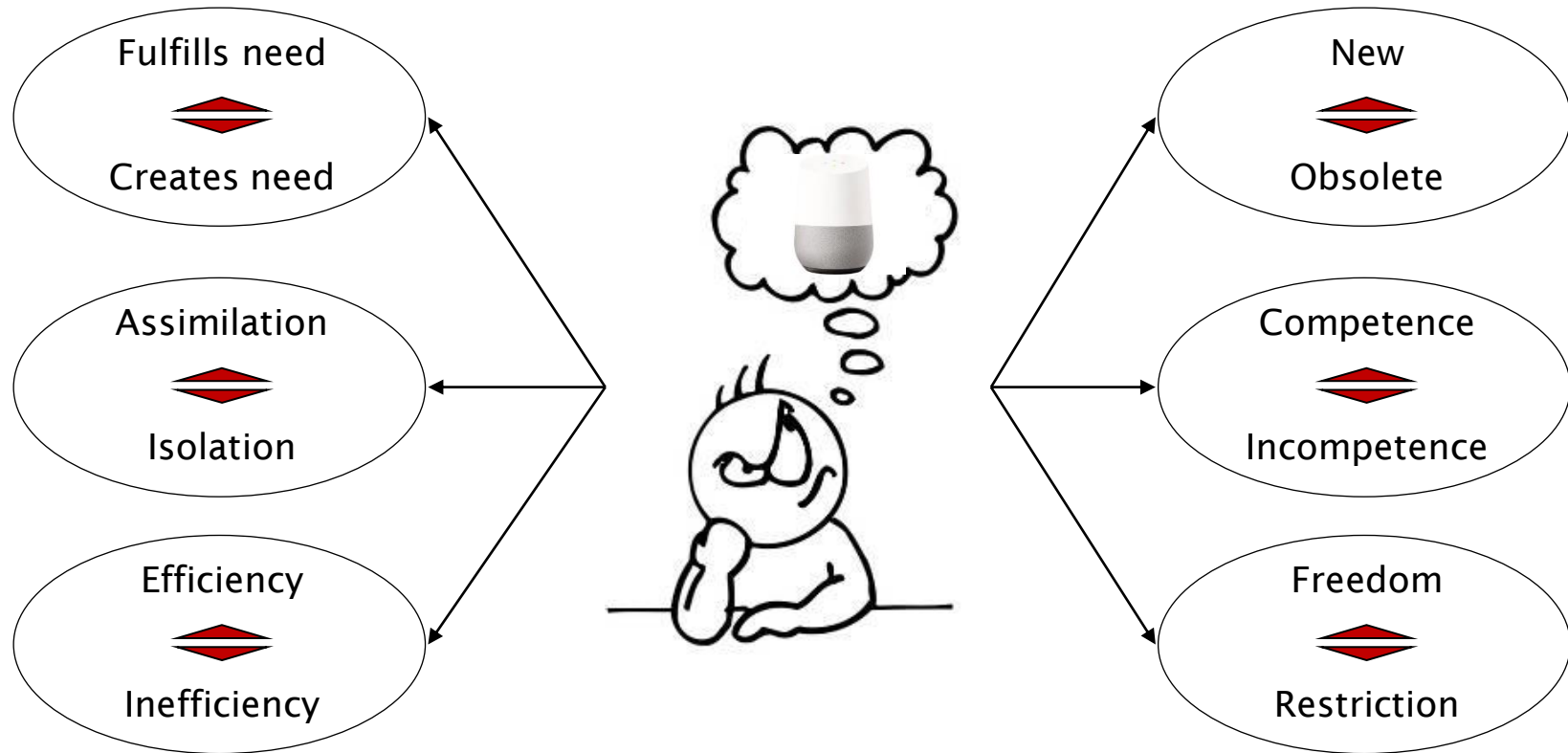
"The self-checkout is supposed to be fast and convenient but that's not always the case. Until they are perfected I'll opt for a live cashier every time."

Georganne Bender
Principal, KIZER & BENDER Speaking



Source: <https://retailwire.com/discussion/shoppers-have-a-love-hate-relationship-with-self-checkouts/>

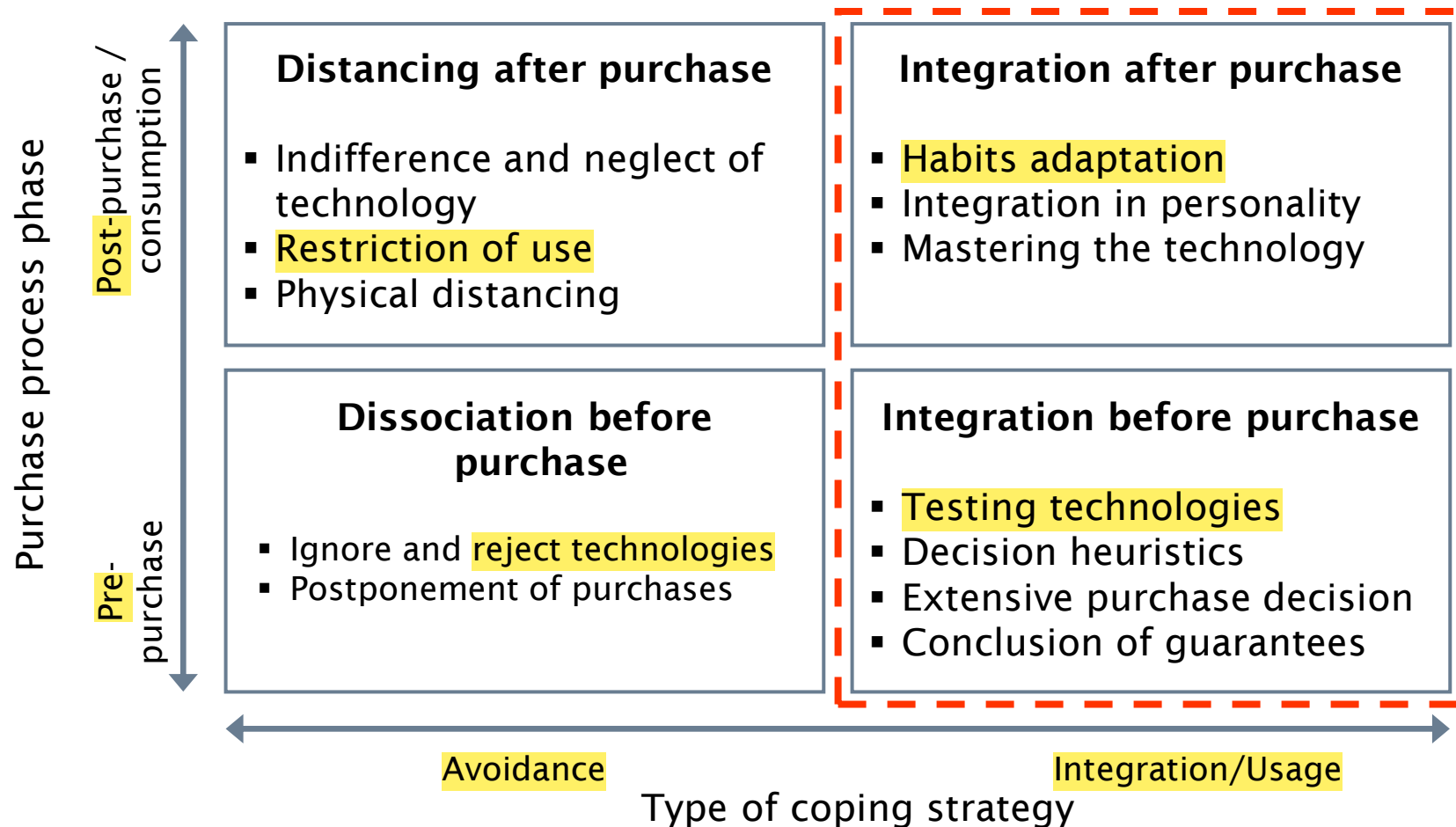
CONTRADICTIONS AND DILEMMAS IN THE EVALUATION OF NEW TECHNOLOGIES



The evaluation of new technologies is often characterized by contradictions/dilemmas

Source: Mick/Fournier (1998), p. 126.

STRATEGIES FOR COPING WITH NEW TECHNOLOGIES



Source: Mick/Fournier (1998), p. 126.

STRATEGIES FOR COPING WITH NEW TECHNOLOGIES



APPROACH STRATEGIES FOR NEW TECHNOLOGIES

1

INTEGRATION BEFORE PURCHASE

- **Testing out:** borrowing equipment from acquaintances, no definitive ownership before the end of a trial and return period
- **Decision heuristics:** buying the best/most expensive alternative, buying a basic set, buying a well-known brand.
- **Extensive decision-making behavior:** Identifying one's own needs and choosing the appropriate alternative
- **Conclusion of guarantees**

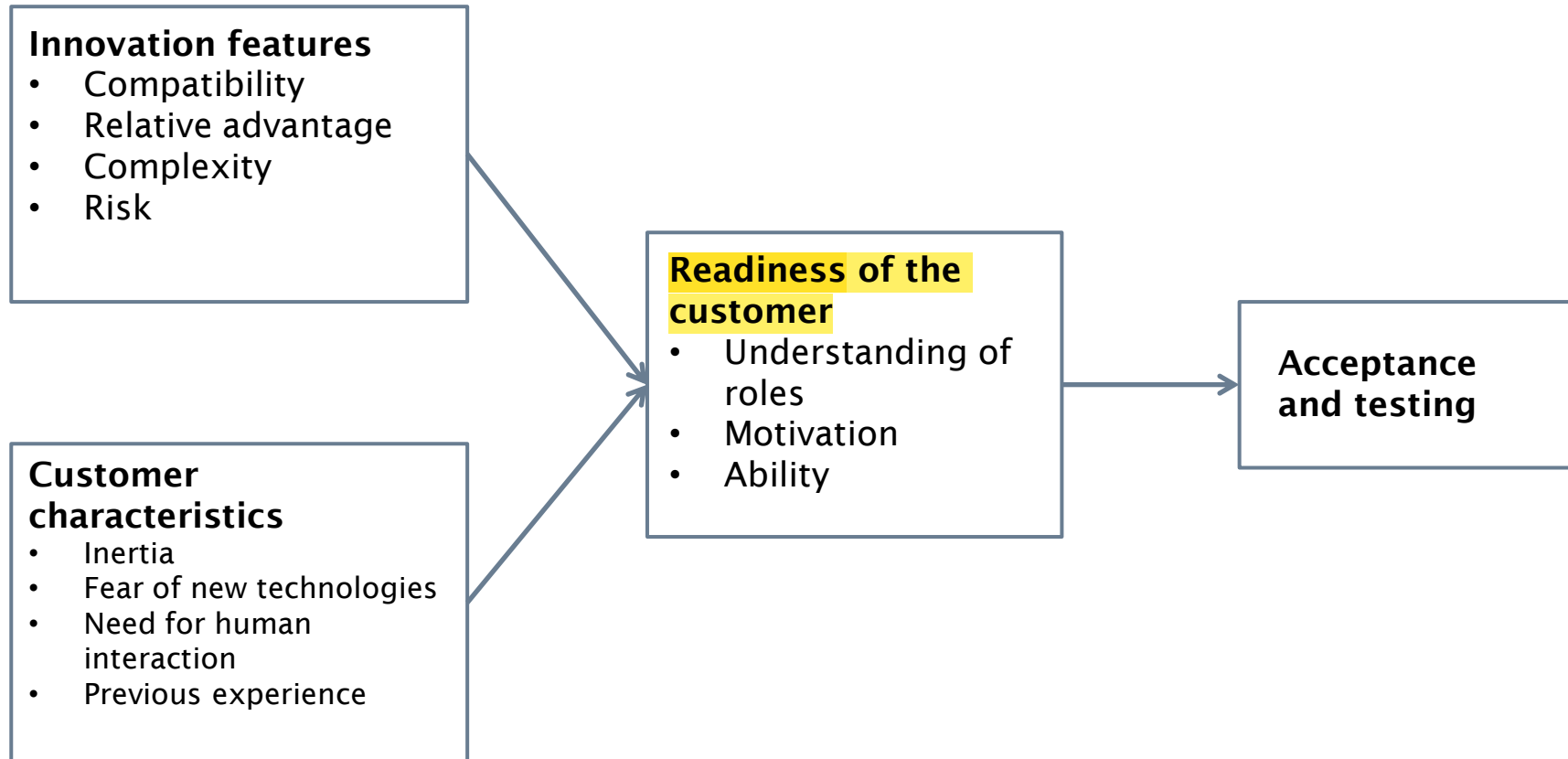
2

INTEGRATION AFTER PURCHASE

- **Adaptation:** changing and adjusting one's habits to meet the demands of the new technology
- **Integration:** Integration of technology into everyday life and one's own personality
- **Mastery:** Mastering technology through intensive learning of its applications, strengths and weaknesses.

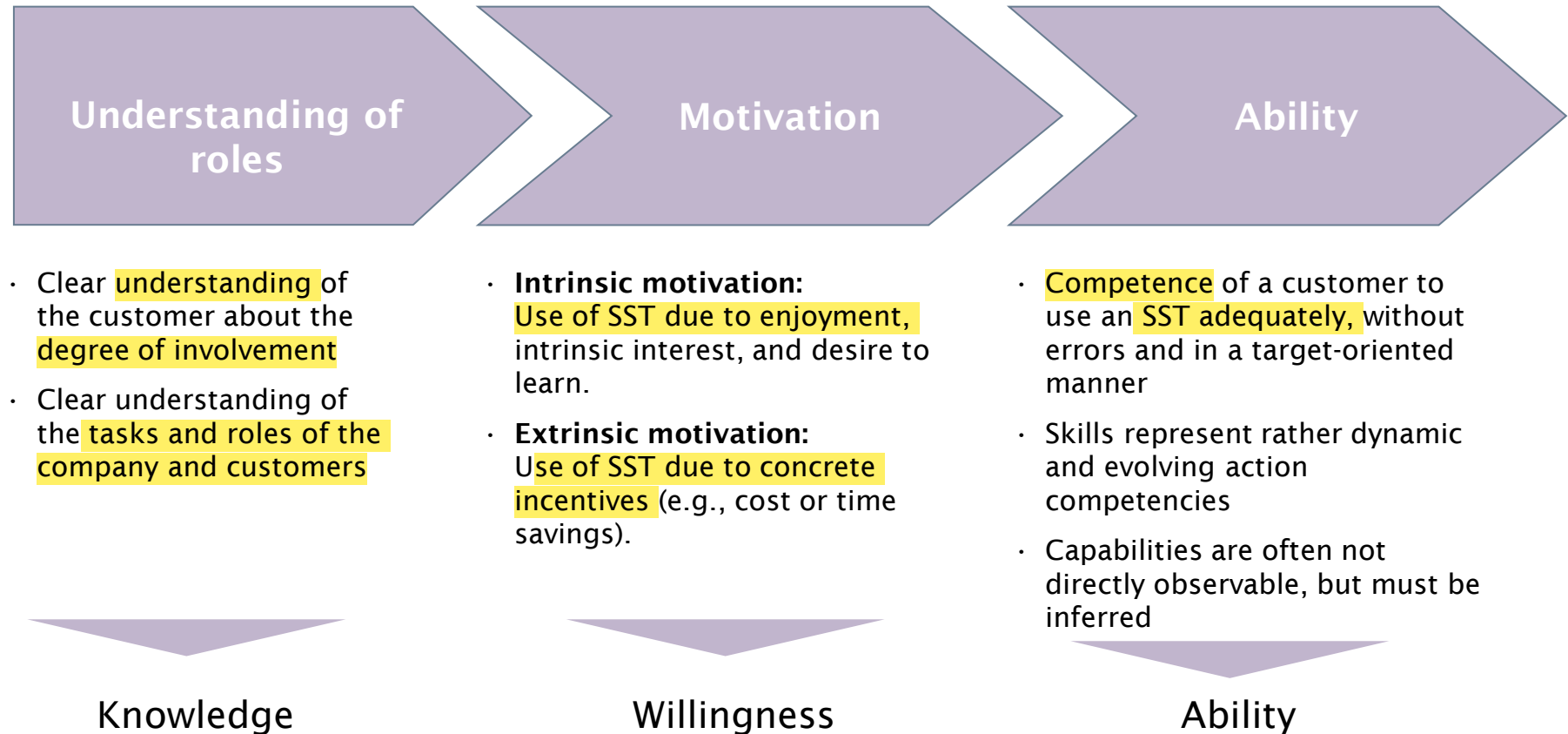
Source: Mick/Fournier (1998), p. 133.

ACCEPTANCE OF SELF-SERVICE TECHNOLOGIES



Source: Meuter et al. (2005), p. 63.

ACCEPTANCE OF SELF-SERVICE TECHNOLOGIES



Source: Meuter et al. (2005), p. 63.

IMPLICATIONS FOR FIRMS

- 1 "For many firms, often the challenge is not managing the technology, but rather getting consumers to try the technology" (Meuter et al. 2005, p. 78)
- 2 Initial use of an SST depends not only on its objective characteristics, but also on psychological variables
- 3 Targeted improvement of role understanding, motivation, and skills promotes initial and continued use of an SST

Source: Meuter et al. (2005)

PROMOTING ACCEPTANCE OF SELF-SERVICE TECHNOLOGIES - SUCCESS FACTORS

- **Build trust:** Customers who trust the service provider are more likely to accept new technologies launched by the provider.
- **Reliability and usability:** Self-service technologies must be reliable and have very good usability. Recommendation: Design and test with customers.
- **Clear and communicable relative advantages:** Self-service technologies must offer a relative advantage over personal service from the customer's point of view. This must be clearly communicated. (Self-checkout vs. Regular checkout)
- **Take customers' routines into account:** Self-service technologies often require customers to change their familiar routines. This should already be taken into account during development. (How do I get customers to use the technology?).
- **Support and training:** Support processes and hybrid solutions are important in introductory phases. Some service providers also successfully offer training. (Guidance, Simple Blueprint, Step-by-Step Guide)
- **Recovery solutions:** Should a technology failure occur, an alternative solution should be available.

Source: Lovelock, C., & Wirtz, J. (2016). Services Marketing: People, Technology, Strategy (8th ed.).

Self-Service Technologies: Study

STUDY: FORCING SST AND CUSTOMER RESPONSE

RESEARCH QUESTIONS:

- What happens when you force customers to use SST? How can negative reactions be intercepted?

BACKGROUND:

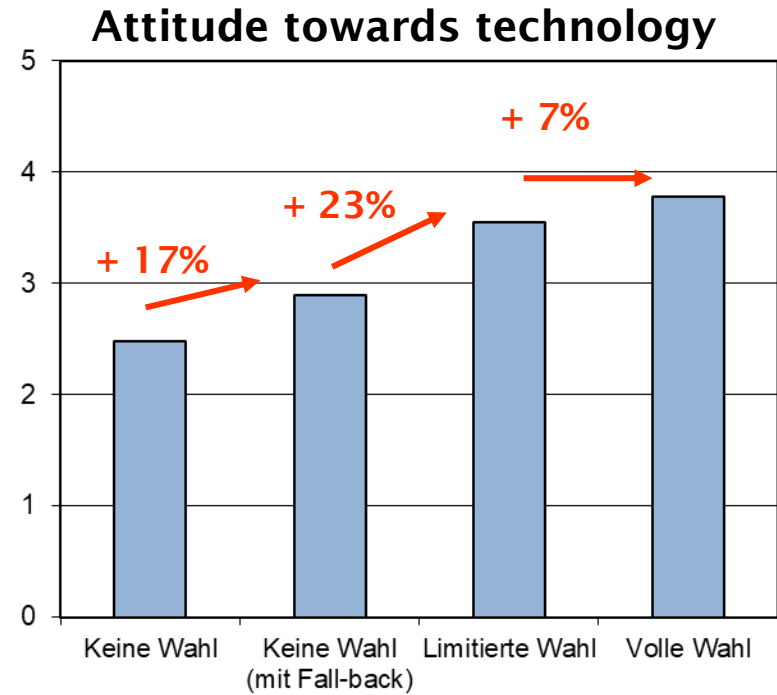
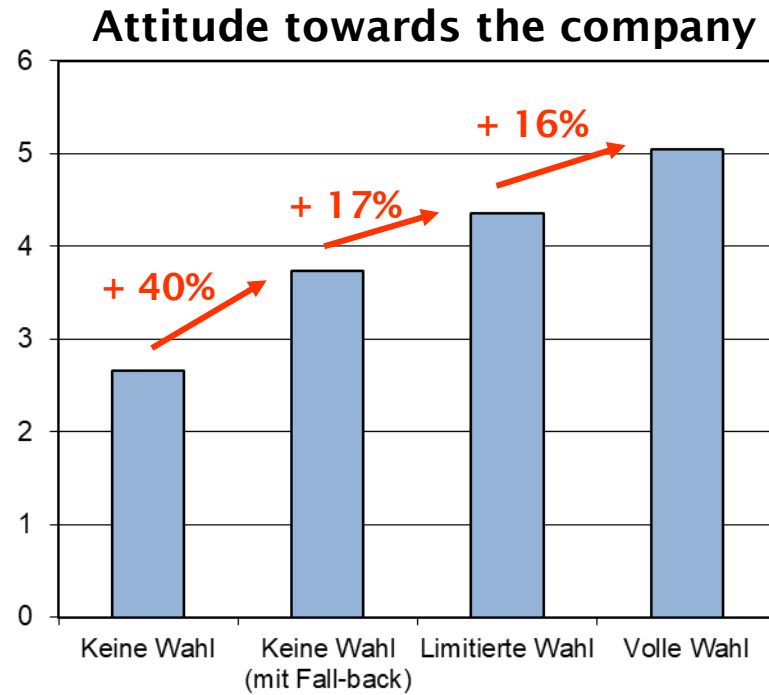
- Forcing SST restricts customer choice and psychological freedom
- Restriction of (psychological) freedom arouses motivation to regain the threatened option (e.g., revaluation of the option, devaluation of other options)

PROCEDURE:

- Scenario-based experiment with 1,150 British rail customers
- Presentation of 4 different scenarios: a) full choice (switch, two SST), b) restricted choice (2 channels), c) SST + employee contact, d) only one SST.
- Subsequent survey of customer reactions

Source: Reinders/Dabholkar/Frambach (2008)

RESULTS



The forced introduction of SST may have negative consequences that can be mitigated by fall-back options.

Source: Reinders/Dabholkar/Frambach (2008)

IMPLICATIONS

- 1 Always offer more than one channel as part of SST (at least offer an alternative as a fall-back).



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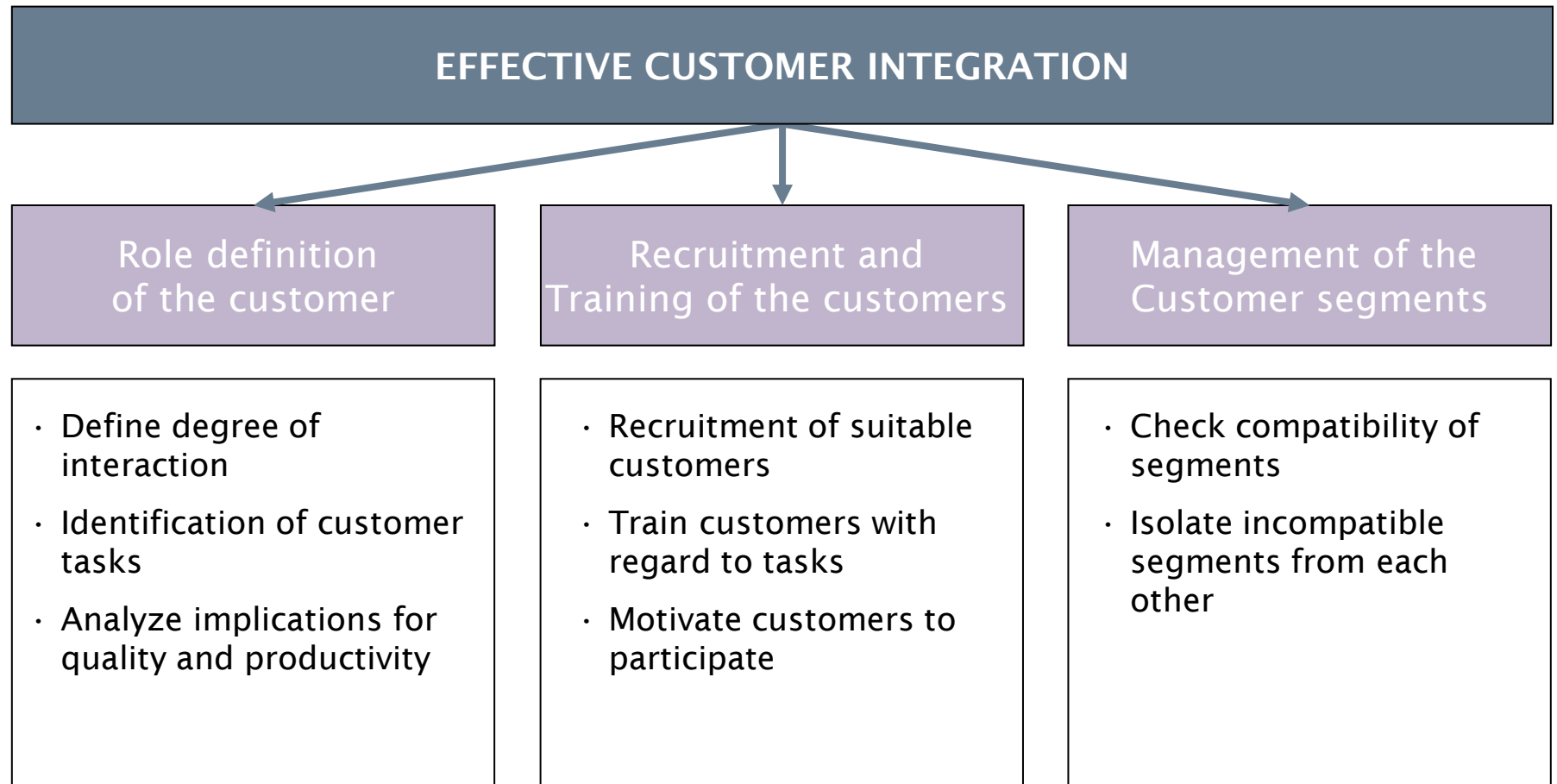


- 2 Full range of physical channels lowers productivity and does not necessarily increase customer satisfaction

Consider broader implications of SST when making decisions (e.g., lower retention, cross-selling and up-selling becomes more difficult).

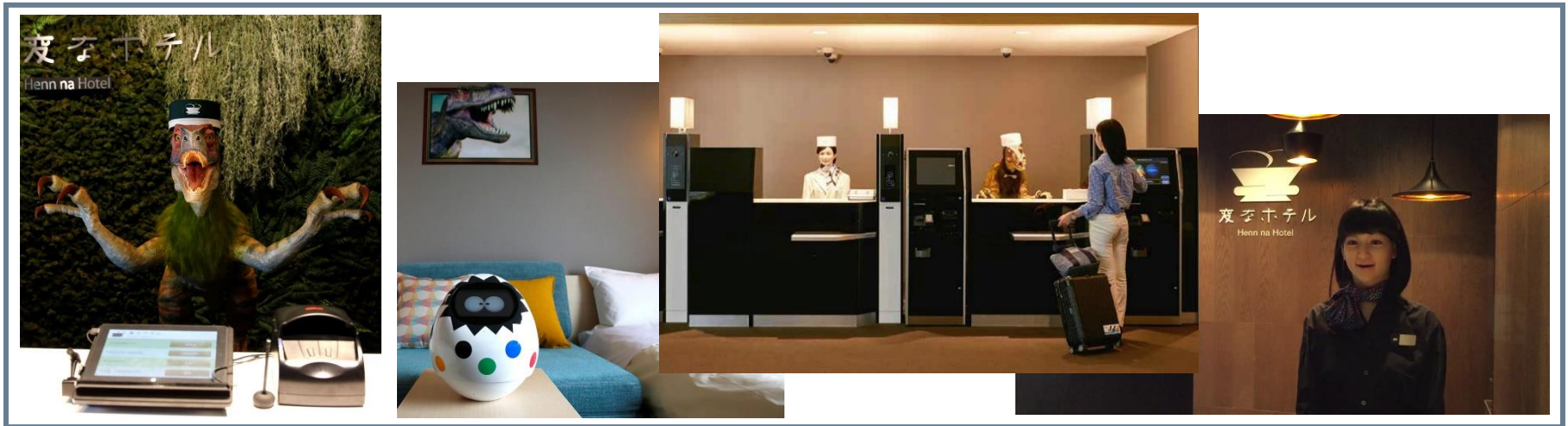
Source: Reinders/Dabholkar/Frambach (2008)

STRATEGIES TO IMPROVE CUSTOMER INTEGRATION



Source: Zeithaml/Bitner/Gremler (2009), p. 400 ff.

Automated social presence and anthropomorphization of technologies



"First Robot-Staffed Hotel"

- Use of human-like robots for reception, room cleaning, etc.
- Technologies such as facial recognition for room access
- Goal: Replace 90% of all hotel services with robots
- Reduces costs and increases convenience

Source: Lovelock/Wirtz (2016), p. 148 f.



#thismorning #phillipandholly #eamonnandruth

Phillip & Holly Interview This Morning's First Robot Guest Sophia | This Morning

https://www.youtube.com/watch?v=5_jp9CwJhcA

Berner Fachhochschule | Haute école spécialisée bernoise | Bern University of Applied Sciences

DEFINITIONS

Automated Social Presence (ASP)

The extent to which machines (e.g., robots) make their users feel as if they are in the company of a social being.

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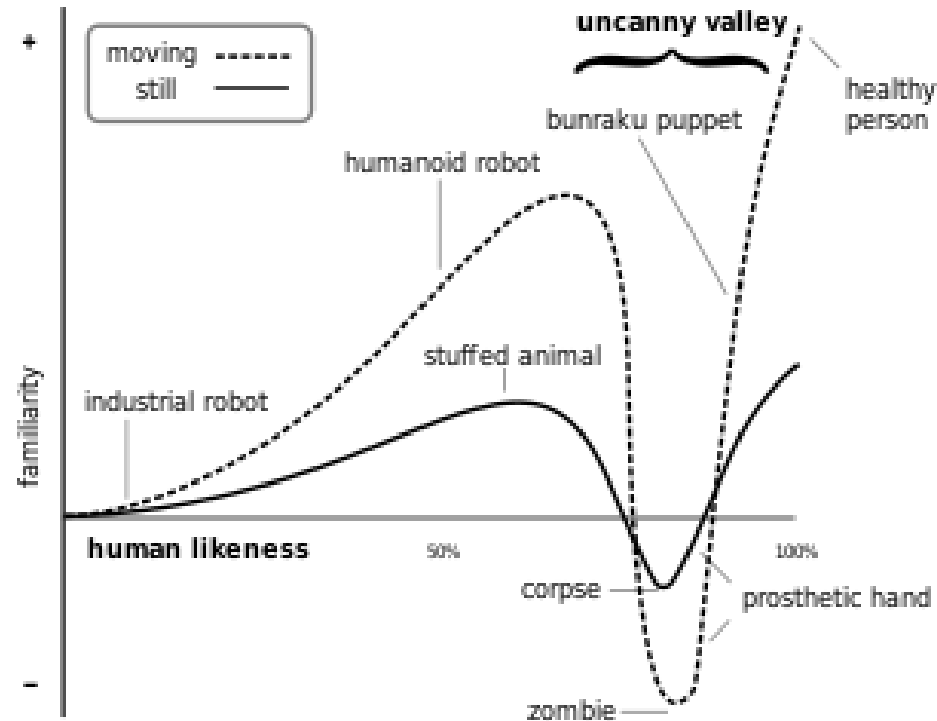
Uncanny Valley Effect

When robots appear more human-like, they initially become more familiar to humans up to a certain point. When the "uncanny valley" is reached, this affinity decreases and a feeling of strangeness, a sense of unease and a tendency to fear and creepiness develop. The uncanny valley describes the negative reaction of humans to certain (too) human-like robots.

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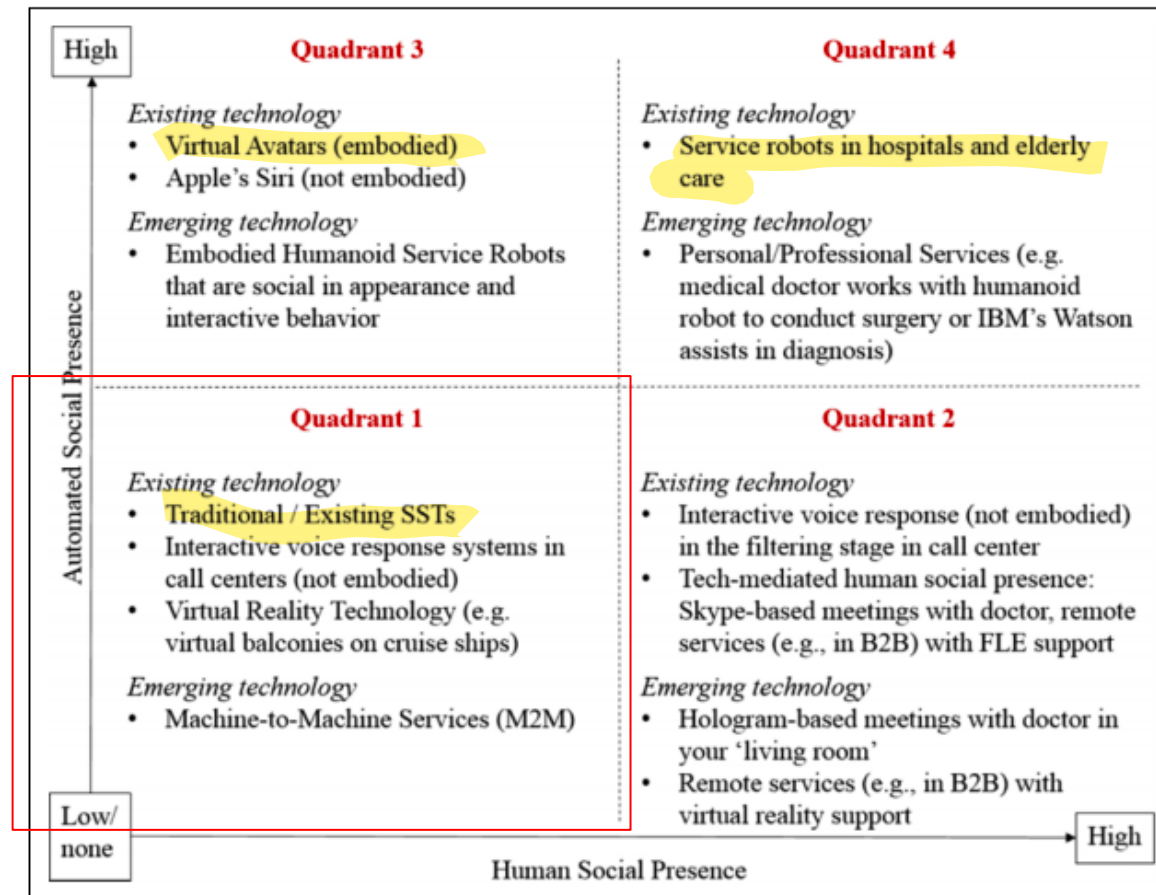
Source: Mori et al. (2012) ; van Doorn et al. (2017)

CHALLENGE IN HUMANOID TECHNOLOGY: UNCANNY VALLEY EFFECT



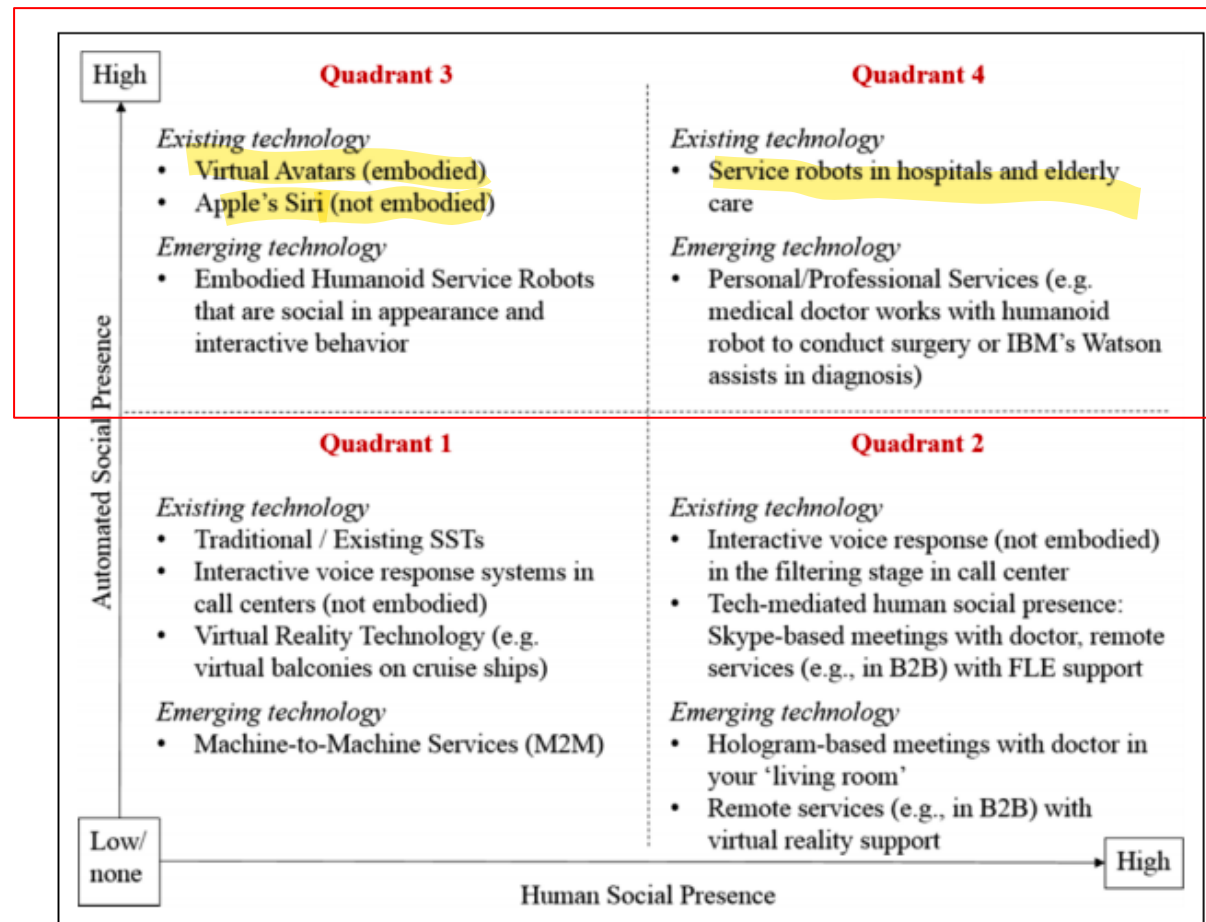
Source: Mori et al. (2012)

TPOLOGY ON TECHNOLOGY FORMS IN SERVICE INTERFACES



Source: van Doorn et al. (2017)

TPOLOGY ON TECHNOLOGY FORMS IN SERVICE INTERFACES

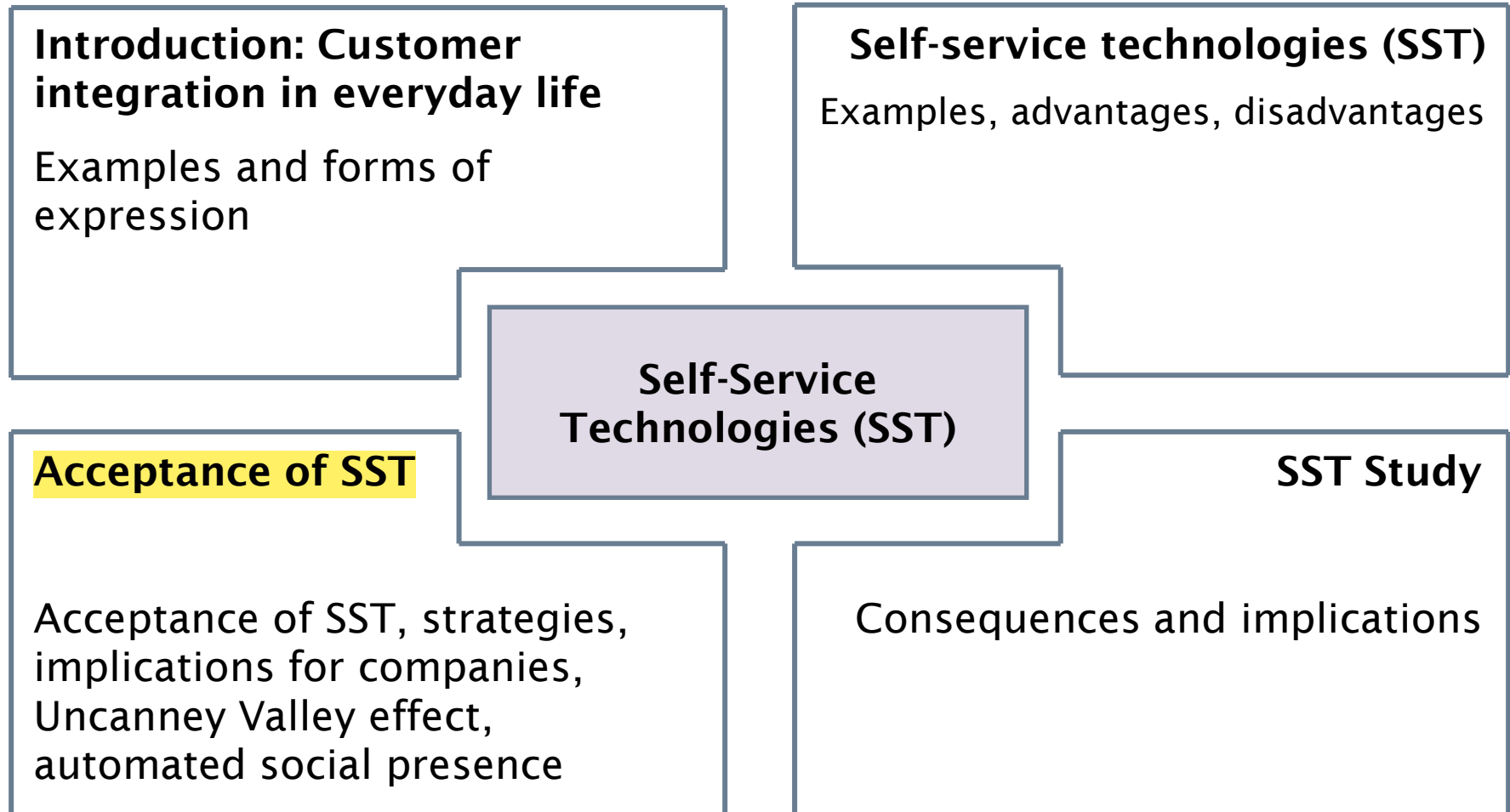


Source: van Doorn et al. (2017)

Self-Service Technologies

Summary

WRAP-UP



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